

CALIFORNIA ENERGY COMMISSION

BLUEPRINT

EFFICIENCY AND RENEWABLE ENERGY DIVISION

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Electronic Compliance Forms

The Energy Commission is in the process of making certain compliance forms electronic, meaning that they can be filled out on a computer before being printed and submitted as usual.

For the residential compliance forms, go to www.energy.ca.gov/title24/2008standards/residential_manual.html#forms.

For the nonresidential compliance forms, go to www.energy.ca.gov/title24/2008standards/nonresidential_manual.html#forms.

If you have any questions about the new electronic forms, please contact the Energy Standards Hotline at (800) 772-3300 (toll-free in California), (916) 654-5106, or title24@energy.state.ca.us



Energy Education Center Wins Awards

The Energy Commission's Energy Education Center website was recently recognized by two organizations for its commitment to helping contractors and others comply with the *Building Energy Efficiency Standards*. The website received a Bronze Award from the Sacramento Public Relations Association at the 2009 CAPPIE awards and an Honorable Mention from the State Information Officers Council at the 2010 SiOC awards. More videos are being developed for the Energy Education Center's Online Learning Center, and they will be posted as they are completed.

The Energy Education Center was featured in Blueprint 94, which may be viewed at www.energy.ca.gov/efficiency/blueprint/. Please visit the Energy Education Center at www.energyvideos.com.

Guide to the Indoor Ventilation Requirements of the 2008 Building Energy Efficiency Standards (ASHRAE 62.2)

The Energy Commission's *Indoor Ventilation Minimum Best Practices Guide*, for compliance with ANSI/ASHRAE Standard 62.2-2007, has been completed and is available at <http://www.energy.ca.gov/title24/2008standards/index.html>. The guide contains, in a checklist format, the requirements for showing compliance with an exhaust-only ventilation approach, including:

- The calculation of minimum whole-building continuous ventilation airflow.
- Minimum requirements for exhaust fan selection and control.
- Minimum fan ratings for intermittent bathroom and kitchen fans.
- The exhaust duct design requirements found in ASHRAE Table 7.1.

The guide also contains reference appendices that include:

- The whole-building minimum airflow equation.
- Fan selection and duct design requirements.
- Sample note blocks to be placed on the building plans.
- An ASHRAE information form.
- A comprehensive two-page checklist of exhaust-only ventilation system requirements.

To consider alternatives to an exhaust-only approach, refer to Section 4.6 of the Residential Compliance Manual or contact the Energy Standards Hotline at (800) 772-3300 (toll-free in California), (916) 654-5106, or title24@energy.state.ca.us.

Indoor Ventilation

Minimum Best Practices Guide

Based on ASHRAE 62.2

Arnold Schwarzenegger
Governor



California Energy Commission

June 2010
CEC-400-2010-006

Energy Standards Hotline

The Energy Standards Hotline, run by the Energy Commission's Efficiency and Renewable Energy Division, provides callers with comprehensive and timely technical information on how to comply with the *Building Energy Efficiency Standards* and on appliances certified for sale in California. Used daily by building, energy, and utility professionals, the Hotline responds quickly to technical questions with a variety of services. The Hotline is available to receive phone calls Monday through Friday, 8 a.m. to 12 p.m., and 1 p.m. to 4:30 p.m.

To have your *Standards*-related questions answered, contact the Energy Standards Hotline at (800) 772-3300 (toll-free in California), (916) 654-5106, or title24@energy.state.ca.us.

The following tables are a summary of the calls received by the Energy Standards Hotline in March and April 2010.

| Caller | Calls |
|--------------------|-------------|
| Contractor | 802 |
| Engineer/Architect | 399 |
| Building Official | 245 |
| Owner/Builder | 163 |
| Energy Consultant | 86 |
| Manufacturer | 38 |
| Other | 227 |
| Not recorded | 6 |
| Total | 1966 |

| Topic | Calls |
|--------------------------|-------------|
| Forms | 288 |
| HVAC | 274 |
| HVAC Changeout | 70 |
| Title 24, General | 230 |
| Lighting, Indoor | 217 |
| Roofs | 204 |
| Software Modeling | 79 |
| HERS Rating/Raters | 63 |
| Fenestration/Skylights | 57 |
| Lighting, Outdoor | 53 |
| Water Heating | 42 |
| Climate Zones | 40 |
| Computer Programs | 37 |
| Walls | 36 |
| Lighting, Kitchen | 20 |
| Website Navigation | 18 |
| Multi-Subject | 13 |
| Floors | 12 |
| Title 24 Code Comparison | 12 |
| Lighting, Sign | 11 |
| Documentation | 9 |
| Reference Appendices | 5 |
| Other | 111 |
| Not recorded | 65 |
| Total | 1966 |

California Energy Commission and Contractors State License Board Team Up to Enforce Compliance with *Building Energy Efficiency Standards*

A memorandum of understanding (MOU) between the California Energy Commission and Contractors State License Board (CSLB) that was approved on June 30, 2010, will help assure that heating, ventilating, and cooling systems being installed, repaired, or replaced in California meet the latest *Building Energy Efficiency Standards (Standards)*.

Under the MOU, the Energy Commission will report to CSLB any allegations of violations of the permits and testing required by the *Standards*. The Energy Commission will assist CSLB investigations and sting operations that target potential violators, and provide testimony and documentation to support CSLB action against licensees who fail to adhere to the *Standards*. CSLB will also partner with the Energy Commission for education and outreach efforts to contractors, consumers, and building department personnel in California.

CSLB's contractor notification effort began in late 2009, and the board ramped up its permit compliance enforcement in January 2010, partnering with the California Building Officials (CALBO). Letters were mailed to C-20 (warm-air heating, ventilating, and air-conditioning, or HVAC) contractors in the cities of Fairfield, Folsom, Grand Terrace, La Puente, Porterville, Rocklin, and Whittier before a series of sting operations was conducted in those cities during February and March, 2010.

Most of the 50 contractors contacted during the sting operations indicated they knew about the permits, energy, and safety requirements associated with HVAC systems. However, some offered to skirt the process in order to offer a lower bid to investigators posing as homeowners. About one third of those invited to the stings committed potential permit violations. As a result of the stings, CSLB issued six citations and two more are pending.

In addition to being a violation of the *Standards*, failure to pull the proper permits and assure that HVAC systems are inspected and approved is also a violation of California Business and Professions Code Sections 7110 and 7090. Contractor discipline can result in up to \$5,000 in fines per citation, as well as suspension and/or revocation of the contractor license.

Additionally, CSLB distributed a letter to its nearly 12,000 C-20 license holders in late June and early July to reinforce awareness of CSLB's accelerated enforcement of *Standards* requirements for HVAC permits and testing. The letter explains the importance of adherence to the *Standards* for energy efficiency, health, and safety. It also outlines the potential penalties for violating the Business and Professions Code by failing to adhere to the *Standards*.

-Contributed by Contractors State License Board.

CABEC Certified Energy Plans Examiner Training and Exams

Would you like to earn a certification showing your competence and expertise in preparing Title 24 Energy Code compliance reports? The California Association of Building Energy Consultants (CABEC) has been certifying Plans Examiners and Consultants to signify their qualification to plan check and/or prepare Title 24 Energy Code documents since 1988.

Passing the Certified Energy Plans Examiner (CEPE) exam results in being assigned a unique CEPE certification number, which demonstrates that you have passed an exam testing your understanding of the *2008 Building Energy Efficiency Standards*. Potential clients can find a complete list of current CEPEs and Certified Energy Analysts (CEAs) on the CABEC website at http://www.cabec.org/index.php?option=com_content&view=category&id=39&Itemid=58.

Training and Certification Exams for the *2008 Standards* have been scheduled for fall of 2010, and registration is open now.

Training is funded by PG&E and administered by CABEC. Training is done by Webcast on September 16 and 21 for residential and on October 21 and 26 for nonresidential. Participation requires a high-speed internet connection.

Exams are administered by CABEC. Residential exams will be given in Costa Mesa and Sacramento on October 8; nonresidential exams will be given in the same cities on November 12.

For questions regarding the CEPE program, call CABEC at 877-530-3045. To register for training and/or the exam, go to http://www.cabec.org/index.php?option=com_content&view=category&id=36&Itemid=55.



Recognizes

Joe Energy
CERTIFIED ENERGY PLANS EXAMINER
 for the
2008 California Residential Energy Standards

This certificate verifies that the individual named above has satisfactorily passed the written examination for the Certified Energy Plans Examiner for the 2008 California Residential Energy Standards. This certificate is awarded in accordance with the guidelines established for Certified Energy Plans Examiners.

CERTIFICATE NUMBER: R08-10-300X

Kim Coolbaugh
 Kim Coolbaugh, Executive Director

Requirements for HVAC Contractors and Demolition Professionals

THE Mercury Thermostat Collection Act OF 2008

The Mercury Thermostat Collection Act of 2008 requires construction and demolition professionals to properly remove and dispose of out-of-service mercury-added thermostats.



Effective July 1, 2009, the law requires the following:

HVAC Contractors who install heating, ventilation, and air-conditioning components are required to:

- Handle and transport out-of-service mercury-added thermostats in accordance with the Universal Waste Regulations (UWR) found in CA Code of Regulations, Title 22, Chapter 23. *For summary of the UWR for out-of-service mercury-added thermostats visit http://www.dtsc.ca.gov/HazardousWaste/upload/UW_-_thermostats_NS.pdf*
- Take out-of-service mercury-added thermostats to a collection location that is operated in accordance with Universal Waste Regulations.

Persons engaged in building demolition are required to:

- Remove out-of-service mercury-added thermostats prior to demolition in accordance with the UWR.
- Handle and transport out-of-service mercury-added thermostats in accordance with the Universal Waste Regulations found in CA Code of Regulations, Title 22, Chapter 23. *For summary of the UWR for out-of-service mercury-added thermostats visit http://www.dtsc.ca.gov/HazardousWaste/upload/UW_-_thermostats_NS.pdf*
- Take out-of-service mercury-added thermostats to a collection location that is operated in accordance with Universal Waste Regulations.

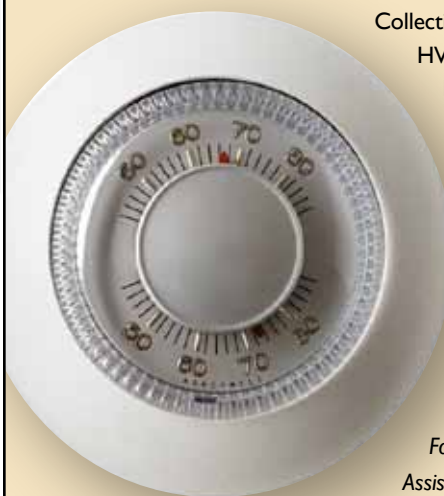
Collection bins for out-of-service mercury-added thermostats are required by law to be provided at HVAC wholesaler locations in California. *To find a HVAC wholesaler near you, visit <http://www.thermostat-recycle.org> ¹.*

Collection bins may also be found at local government agency household hazardous waste (HHW) collection facilities. *To find a HHW collection facility near you, visit <http://www.dtsc.ca.gov/HazardousWaste/UniversalWaste/HHW.cfm>*

Failure to comply with this law may result in penalties of up to twenty-five thousand dollars (\$25,000) for each separate violation or, for continuing violations, for each day that a violation continues.

Learn more about the law and the obligations for contractors and building demolition at: http://www.dtsc.ca.gov/HazardousWaste/Mercury_Therm_Act.cfm

For questions/concerns, contact DTSC at thermostats@dtsc.ca.gov or DTSC's Regulatory Assistance Officers at 800-72-TOXIC (800-728-6942).



¹ The link provides additional information that may be useful or interesting and is being provided consistent with the intended purpose of the Mercury Thermostat Collection Act. However, DTSC cannot attest to the accuracy of information provided by this link or any other linked site. Providing links to a non-DTSC Web site does not constitute an endorsement by DTSC or any of its employees of the sponsors of the site or the information or products presented on the site.



Department of
Toxic Substances
Control

Building Energy Efficiency Standards Training

Please visit the Energy Commission's new **Energy Education Center** at:

www.energyvideos.com

For training offered by utilities and others, please visit the following websites:

Pacific Gas and Electric Company

www.pge.com/mybusiness/edusafety/training/pec/classes/

Southern California Gas Company

<http://seminars.socalgas.com>

San Diego Gas & Electric Company

<http://seminars.sdge.com>

Southern California Edison

www.sce.com/b-sb/energy-centers/workshops-classes.htm

Sacramento Municipal Utility District

www.smud.org/en/education-safety/

California Building Officials

www.calbo.org

California Association of Building Energy Consultants

http://cabec.org/cepe2008standardsinfo_2010.php



Flex Your Power News

www.fypower.org/news



www.gosolarcalifornia.org

The 2008 Building Energy Efficiency Standards are now in effect.

Arnold Schwarzenegger
Governor



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BLUEPRINT

Erik Jensen
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Need Help?

Energy Standards Hotline

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